

## ABSTRACT OF THE DISCLOSURE

A system ~~for use in a program development environment~~ that detects and resolves circular paths ~~that may be defined~~ within a graphical flow diagram that represents the logical operation of a corresponding application program. The flow diagram is formed by interconnecting a ~~plurality of~~ symbolic representations that correspond to program objects configured to execute associated functions in response to corresponding triggering events. The functions of the program objects are ~~[[selectively]]~~ called upon and executed by the application program at run-time. At the program objects, a busy indicator is established. When a program object is triggered by its respective event, the object first tests its busy indicator to determine whether it is already in the process of executing its associated function. If ~~the object is not currently executing, not~~, it proceeds to execute its associated function in response to an earlier triggering event. If, however, the ~~[[program]] object~~ is already in the process of executing its associated function, then the object is blocked from re-executing in response to this new triggering event.